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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,784	01/22/2001	Marc Morin	CISCP239	8354

22434 7590 07/16/2004

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EXAMINER

KLIMACH, PAULA W

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/766,784

Applicant(s)

MORIN, MARC

Examiner

Paula W Klimach

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao (6,459,427 B1) in view of Schneier.

In reference to claims 1, 5, 9, and 13, Mao teaches a method and system of modifying the PCR with conditional access messages. The system transports streams at different bit rates, re-assign PID, adjust PCR, and insert conditional access messages such as ECM and EMM (column 5 lines 18-24). Conditional access messages are used for the decryption and therefore authentication of the receiving system.

However Mao does not disclose the modification of the PCR by logically anding off a portion of the lower bits, and therefore inserting the digital signature.

Schneier discloses the association of the digital signature with a timestamp (page 38). The PCR is timing information used in the transmission of digital multimedia information.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to insert the timestamp associated digital signature of Schneier in the modification of Mao. One of ordinary skill in the art would have been motivated to do this because relating the timestamp and the digital signature discourages fraudulent activity of the reuse of digitally signed information.

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In reference to claims 2, 6, 10, and 14, the wherein the digital signature may span a plurality of PCR fields in a plurality of packets. The number of packets used to store the digital signature is dependent on the size of the digital signature because the digital signature depends on the hash of the document (Schneier page 38 paragraph 6).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to insert the timestamp associated digital signature of Schneier in the modification of Mao. One of ordinary skill in the art would have been motivated to do this because relating the timestamp and the digital signature discourages fraudulent activity of the reuse of digitally signed information.

In reference to claims 3, 7, and 11, wherein the digital signature is encrypted to produce an encrypted signature (Schneier page 37).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to encrypt the digital signature as in Schneier. One of ordinary skill in the art would have been motivated to do this because by decrypting the signature with the public key the information is authenticated.

In reference to claims 4, 8, and 12, wherein the encrypted signature is scrambled to provide for error correction. It is common practice to add error correction to packets that are transported over the network (Schneier page 179 paragraph 1).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add a verification block as in Schneier in the system of Mao. One of ordinary skill in the art would have been motivated to do this because a receiver can detect if a particular key he has received is correct.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

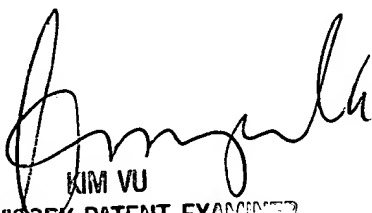
Huang et al	6,546,013
Itakura et al	6,493,832 B1
Peterka et al	20020174366 A1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W Klimach whose telephone number is (703) 305-8421. The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK
Monday, July 12, 2004


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100